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ABSTRACT

Provided in this report are a number of empirical and conceptual papers dealing with barriers to youth employment. The first paper, "Barriers to Youth Employment: A Review," contains a summary of more than 100 reports on causes of youth employability problems and poses several alternative strategies for formulation of youth labor market policy. The second paper, "Ethnographic Methods for Exploring the Education/Work Nexus," describes methods in applied anthropology that could be useful in studying youth employability problems. Then three empirical papers follow: "Chances of Previous Work Experience among Unemployed Youth," "Chances of Job Loss among Teenagers and Young Adults: Implications for Part Time Work," and "Characteristics of Unemployed Youths." These papers, using data from the 1979 Current Population Survey, found that age and school enrollment status are among the strongest correlates of desire for part-time versus full-time work, of previous work experience, and of chances of job loss among 16- through 24-year-olds in the civilian, non-institutional population of the United States during March, 1979. The papers are intended for planners and policy makers in vocational education as well as for students of the youth labor market. (Author/KC)

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FINAL REPORT

Barriers to Youth Employment
(Contract No. 83-0804)

David Lynn Passmore

Occupational and Vocational Studies
The Pennsylvania State University

University Park, Pennsylvania

July, 1981

THE PENNSYLVANIA STATE UNIVERSITY DEPARTMENT OF VOCATIONAL EDUCATION

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VOCATIONAL — TECHNICAL EDUCATION **Research Report**

Pennsylvania Department of Education
Bureau of Research and Evaluation
Research Coordinating Unit
For Vocational Education

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Abstract

Barriers to Youth Employment

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Summary

Provided in this report are a number of empirical and conceptual papers dealing with barriers to youth employment. The first paper, "Barriers to Youth Employment: A Review," contains a summary of over 100 reports on causes of youth employability problems, and poses several alternative strategies for formulation of youth labor market policy. A second paper, "Ethnographic Methods for Exploring the Education/Work Nexus," describes methods in applied anthropology that could be useful in studying youth employability problems. Then, three empirical papers follow: "Chances of Previous Work Experience Among Unemployed Youth," "Chances of Job Loss Among Teenagers and Young Adults: Implications for Vocational Education and Training," and "Relationship Between Preferences for Part-Time Work and Characteristics of Unemployed Youths." These papers, using data from the 1979 Current Population Survey, found that age and school enrollment status are among the strongest correlates of desire for part-time vs. full-time work, of previous work experience, and of chances of job loss among 16- through 24-year olds in the civilian, non-institutional population of the United States during March 1979.

Audience

These papers will be useful to planners and policy-makers in vocational education as well as to students of the youth labor market.

Publication Available

Final Report

Barriers to Youth Employment:

A Review

The Pennsylvania State University

David Lynn Passmore

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Barriers to Youth Employment:
A Review

Five dollars and a good cigar to anyone who gets me out of this mess. Sifted taxonomically into various piles on the floor around me are several feet of reports, reprints, microfiche, and books on youth employment. Some of these pieces of literature are brief; others are weighty tomes. Some are simple-minded; others are steeped in jargon-laden theory. Some have a strong polemical tone; others are bland empirical displays. The literature defies simple characterization. Perhaps the single generalization I can draw from it is that the causes of youth employment problems are diverse and not well understood, even though, as the rubble on my floor demonstrates, this topic has been a hotbed for policy research and public debate for many years.

People are classified as unemployed in official government statistics if they are not working, are able to work, and actively are seeking work. In recent years, 50 percent of the unemployed in the United States have been less than 25 years old, with 16- through 19-year olds accounting for about one-half of this youth unemployment. Over the past 30 years, the unemployment rates of 16- through 19-year olds have been between 1.5 and nine times as high as general unemployment rates, depending on whether race and school completion are considered. For non-white youths these rates have been twice as high as for whites. High school dropouts have had two times the unemployment rates of high school graduates and three times those of college graduates. A higher proportion of black and Hispanic youths than whites not enrolled in school have been high school dropouts.

Why have youth unemployment rates been so high compared to other groups? The pursuit of an answer to this question is not a trivial academic puzzle; rather, the answer has strong practical consequences for, among other areas, monetary and fiscal policy, public budget allocation, and the level and kind of effort by public education. For instance, would control of the prime interest rate charged by Federal Reserve Banks be a more effective tool against youth unemployment than increases in CETA authorizations? Would a decrease in the marginal tax rate for personal income increase youth unemployment? How would a shift in the federal budget from social to defense programs affect youth unemployment? Would increased spending for vocational education reduce youth unemployment? Would the reduction of youth unemployment also reduce juvenile crime? The answers to these policy questions require an understanding of the causes of youth employment problems.

Explanations of high youth joblessness rates vary, often in confusing ways, according to the world views and methods employed by the analysts providing the explanations. For example, some demographers see youth population trends dominating youth employment trends. Some educators point to attitudinal, technical, and basic skills deficits as the roots of youth employability problems. Some economists resort to explanations based in market failures or imbalances such as restrictive minimum wages or imperfect information about labor markets among employers and youths. A grand synthesis of these views seems impossible. The remainder of this essay is motivated by a more modest aim--to provide a brief review of some of the literature treating barriers to youth employment.

The following are major themes in the vast literature on barriers to youth employment:

- Too many youths are seeking work for the jobs available
- Youths lack necessary skills
- Youths are in competition for jobs with other demographic groups
- Youths lack serious commitment to work
- Young workers cost too much
- Employers discriminate against youth
- Youths do not know how to find jobs waiting for them
- Youths face legal barriers to employment
- Youths face a mismatch between their residence and location of jobs

These themes are used in the remainder of this essay to organize the literature reviewed.

Barriers

Too Many Youths

The post-war baby boom frequently is cited as a major underlying force leading to the labor market problems of teenagers throughout the 1960's and 1970's. After falling consistently over the first four decades of this century, the birth rate began to increase about 1940, going from a low of 18.4 (births per 1,000 persons) in the 1930's to over 25 by the late 1950's (Bowman, 1977). This marked increase in fertility created a bulge in the age distribution of the United States population. This bulge moved to working age in the 1960's and 1970's.

The number of young people reaching working age between the mid-1950's and early 1970's nearly doubled each year. Moore (1977) observed that this was like "throwing all of Canada onto the American labor market" (p. 2). In the absence of immediate labor market adjustments, this increase in the supply of young, inexperienced workers probably contributed to high unemployment rates among youth. A number of empirical studies have demonstrated a negative net effect of cohort size on youth unemployment rates (see, e.g., Flaim, 1979, Wachter & Kim, 1979, and Kim, 1980, Chapter 4). Kalachek (1973) felt that these unemployment problems were aggravated by the preference of youth for atypical work patterns in limited supply, characterized by part-time, part-year jobs fitting into youth school enrollment and leisure patterns. The far-reaching effects of the post-war baby boom are beginning to be felt in housing and other markets.

School enrollment rates have increased dramatically over the past 20 years. Increases in white youth enrollment rates occurred during the 1950's and 1960's; during the 1970's, black youth enrollment rates rose as high as those for whites (see Mare & Winship, 1980, for a discussion of these trends). Some analysts have concluded that schooling has provided a "holding tank" for the crowded labor market by drawing youth out of the labor force (Duncan, 1965). However, increased school enrollment actually may have increased unemployment by lengthening the period of weak labor force attachment among youths. Feldstein (1973), Folk (1968), Kalachek (1973), and Lazear (1977) have argued that, because students move frequently in and out of the labor force and often are between jobs, measured unemployment may have been worsened by high school enrollment rates during the 1960's and 1970's.

The American economy struggled valiantly to produce jobs for the products of the post-war baby boom by creating millions of new jobs every year. However, youth labor force participation rates increased more rapidly than the percent increase in jobs (Ginzberg, 1980, p. 4) and in the population itself (Bowman, 1977, Chart 1) during the 1960's and 1970's. Not only were there more jobs, but also there were more youths looking for them than ever before.

Many public policy makers seem ready to breathe a sigh of relief after reading youth populations projections. According to Bowman (1977), the labor

force will grow only two-fifths as fast between 1985 and 1990 as between 1980 and 1985. The proportion of teenagers in the population will drop sharply, producing possibilities for lowering the youth unemployment rate (Easterlin, 1978). This decrease of population pressure on youth employment may not occur for blacks and Hispanics due to their higher than average fertility rates. But, if the number of youths in the population provided the only barrier to youth employment, then a direct reduction in youth employment problems might be expected throughout the next decade. Things are not quite as simple, though. In fact, the higher than average unemployment rates among non-white youths provide a challenge to the notion that cohort size is as important as other factors in youth employment problems.

Lack of Skills

Lack of necessary skills for successful employment is stated frequently in the career education literature as the reason for youth unemployment problems (see, for instance: Gallagher, 1976; Hoyt, Evans, Mackin, & Mangum, 1972; Wirtz, 1975). The evidence supporting this attribution is vague and equivocal.

Volumes of task analyses have verified the technical content of a variety of jobs. However, there is no evidence that technical skills deficits are a direct cause of youth employment problems. Obviously, specific technical skills are necessary for successful employment in many occupations. However, the high inter-occupational mobility of American workers (Sommers & Eck, 1977) reflects the adaptability of skills between many occupations (Bowles, 1969; Dougherty, 1971; Parnes, 1968).

Many analysts assert that the training necessary for most "youth jobs" can be completed briefly. Tyler (1976) reported the results of a joint effort by the National Assessment of Educational Progress and the United States Bureau of Labor Statistics (BLS) to identify training requirements for entry-level jobs. The BLS developed a list of the 50 most common jobs held by workers with less than a college education. A conference of United States Employment Service personnel, vocational education teachers, and industry personnel directors chose 30 jobs from the list of 50 that seemed to be major entry-level jobs for young people not entering college after high school. The 30 jobs were not in unskilled labor categories. The conference members estimated that two-thirds of the 30 jobs required academic skills and productive work habits, but very little specialized technical training. For most of the jobs requiring training, they estimated that necessary technical skills could be acquired in less than four weeks.

Considerable effort has been channeled into improving personal/social skills believed to be restricting the employability of youth (see, e.g., the curriculum materials compiled by Wircenski, Passmore, Emshoff, Ay, & Kulahci, 1981). These personal/social skills also have been called school-to-work transition skills (Passmore, Wircenski, Hillis, Emshoff, Kulahci, & Ay, 1981) or survival skills (Nelson, 1977). The typical approach used to identify these skills is to survey employers' beliefs about the necessity of elements in a list of personal/social skills created by the author of the survey.

Richards (1980) conducted a study representative of others on the identification of personal/social skills for employment (see also: Garbin, 1967; Garbin, Salomone, Jackson, & Ballweg, 1970; Nelson, 1977). A questionnaire was distributed to Philadelphia service clubs, such as the Rotary and Kiwanis, to collect information about the relative importance of previous work experience and various personal/social attributes in decisions to hire youths. Respondents viewed personal/social skills as more important than previous work experience.

Measurement problems exist in studies such as Richard's because evidence for the validity of employers' responses often is not provided. Is the survey author's provisional list of personal/social skills exhaustive? By what standard? And, does providing this list create a response set for employers? Are employers responding normatively? If so, from what value positions? Are employers' responses based on careful analyses of problems or terminations of their young workers, or, rather, on opinions not bolstered by evidence? Employer surveys visible currently in the literature do not seem to be helpful in determining the incidence and nature of actual personal/social skills deficits that may keep youths from securing and keeping jobs.

Surprisingly little evidence is available about the roles of deficits in basic skills--reading, writing, computation--in youth employability problems. Tyler (1976) observed that basic skills deficiencies among minority youths might be a factor contributing to their high unemployment rates compared to other cohorts. However, Thomas (1979, p. 2) noted that high school completion did not lower unemployment rates among black youths during 1977. Thomas's finding merely raises the question of whether high school completion or, for that matter, years of schooling provide information about the quality of basic skills preparation.

Greenfield (1980) used an empirical human capital model to determine that functional literacy is related to employability. However, Furr (1980) found that reading and mathematics achievement among 1,000 sample members of the National Longitudinal Study of the High School Class of '72 were unrelated to their incidence of unemployment, occupational classification, income, job satisfaction, or job tenure. Reubens (1974) asserted that from 1959 to 1971 only a small fraction of male high school graduates had first jobs that could be classified as using their school-acquired skills. Additional information is needed on the extent and nature of basic skills problems in determining youth employability.

As a result of the confusion over the role of various types of skills in youth employability, public policy regarding youth labor market problems has lacked a sense of certainty. Would a tax cut do more for youth employment than increased effort in vocational education and training? At the root of the answer to this question are the diverse beliefs that policy-makers hold that youth unemployment is frictionally, cyclically, or structurally determined.

According to Lerman, Barnow, and Ross (1979), frictional unemployment results from the natural movement of people between jobs and in and out of the labor force, and may actually be a sign of normal turnover and employment opportunity in a thriving economy. Cyclical unemployment is caused by the loss of jobs or, more generally, by inadequate demand for goods and services. According to Feldstein (1973):

> The growth of demand for goods and services does not always keep pace with the expansion of the labor force and the rise in output per man. Firms therefore lay off employees and fail to hire new members of the labor force at a sufficient rate. The result is a pool of potential workers who are unable to find jobs. Only policies to increase growth of demand can create jobs necessary to absorb the unemployed. (p. 5)

Wallich (1979), a member of the Board of Governors of the Federal Reserve System, presaged the Reagan administration's approach to economic problems by stating that, "the type of action that would simultaneously reduce unemployment and inflation is represented by a family of tax-oriented incomes policies" (p. 13).

Structural unemployment is generated by a mismatch between people and jobs, and is thought to be reflected in the incidence of long-term unemployment within

demographic groups (Gilpatrick, 1966, Chapter 1). Miernyk (1960, p. 411) attributed structural unemployment to migration of industry, technological change, shifts in kind of goods and services demanded, changes in patterns of international trade, and depletion of natural resources. People without the skills for successful employment are one form of mismatch creating structural unemployment. Unfortunately, no easy and certain way exists to determine what portion of youth employment is structural and, within that portion, due to lack of skills to guide public policy. In the absence of better information about how lack of various types of skills contribute to youth employment problems, the acrimonious policy debate about proper measures to treat youth joblessness will continue (see Killingsworth, 1965, 1976, for a taste of the bitterness of the argument).

Competition

Competition for jobs among youths, illegal aliens, and adult women has been offered as a cause of youth labor market problems. Methodologies exist for estimating the impact of illegal immigration on the total United States labor force (Briggs, 1976; Chiswick, n.d.g.; North & Houstoun, 1976; North & Weissert, 1973), but these have not been applied to the study of youth labor markets. Priore (1979) and Wachter (1978) have reasoned the effects of illegal immigration on youth employment mostly from anecdotal evidence. Data needed to examine the consequence of illegal immigration for youth employment are of poor quality (Heer, 1979); most of the available information concerns illegal Mexican immigrants, making generalizations to the total immigrant population improper (Scanlon, 1979). At the time this essay was being written, no consistent policy concerning illegal immigration was available from the Reagan administration due to its attention to general economic policy concerns.

Labor force participation of women has increased steadily over the past 30 years. The Organization for Economic Cooperation and Development (1977, p. 15 and Table 1) observed that youth unemployment rates were correlated with the size of the adult female share of the labor force in its member countries. Osterman (1980) found that increased labor force participation among adult white women was related to the rise of teenage unemployment in Standard Metropolitan Statistical Areas in the United States. In a methodologically more sophisticated study than Osterman's, Grant and Hammermesh (1980) provided evidence that, for the manufacturing sector in 1970, adult white women and youths were substitutes

in production; that is, increasing employment of the former will, ceteris paribus, displace the latter from jobs. The trend toward market production by women is likely to continue to affect the employment prospects of youths.

Lack of Serious Commitment to Work

Another barrier to employment of youth that has been cited is the lack of serious commitment of youth to legal, market work. According to Feldstein (1977) and Freeman (1980), youths do not have the same family and financial responsibilities as older workers; and, youths desire more leisure than is consistent with full-time employment. Feldstein (1973) felt that this was consistent with the increase in real wages over the past 30 years which "permit a comfortable standard of living with less work than was possible before" (p. 13). Also, the illegal underground economy holds the potential for greater economic returns for many youth than legal work. Bullock (1973; supported by Freeman, 1978) concluded, on the basis of interviews with youths in Watts and Los Angeles, that "the subeconomy is probably the greatest single source of market income for young men in the central city."

Surely a general deterioration in the work ethic among youths would be evident in a variety of social indicators; but, this does not seem to have appeared. Declines in youth labor force participation have not been observed, except among black youth. However, Wachter and Kim (1979) concluded that, in part, higher school and military enrollment rates among non-white youth are behind this trend. In fact, Stephenson (1976) and Osterman (1980) demonstrated that most youths take the first job that they are offered. This acceptance of work, although perhaps impulsive, certainly does not reveal any palpable distaste for paid employment. Fetters (1975) and Yankelovich (1974) found a strong commitment to a work ethic, even during an era when the alienation of youth from adult society was reported ad nauseum in popular media. And, among youth who found jobs, the 1972-73 Quality of Employment Survey (Quinn & Shepard, 1974) revealed no differences between young and adult workers in reported absentee rates (see Berryman, 1978, Table 10, pp. 52-53). Evidence for lack of commitment to work as a reason for youth employment problems is weak.

Cost Too Much

Of all the factors involved in youth employment problems, none has been debated more extensively than the minimum wage. Bowers (1979) summarized two explanations of the effects of minimum wage legislation of youth employment:

1. Minimum wages may price many allegedly "less productive" young people out of the market. According to standard labor economic theory, wages reflect the marginal productivity of labor; the minimum wage, to use this line of reasoning, is compensation beyond what a young worker could produce. Thus, the hiring of young workers is inefficient.

2. Minimum wages may restrict opportunities for youths who would work below the minimum. Because the need to develop labor market experience is so critical among young people and their need for income may not be as great as that felt by adults, restricting wage offers by firms to a minimum level actually may harm current and future employment for youth.

According to Kelly (1980), the weight of empirical evidence indicates that minimum wage legislation has had negative, but small, effects on youth employment. For instance, Swinton (1980) estimated that the 1979 minimum wage increase cost teenagers 90,000 jobs or a one percent increase in their unemployment rate. Side effects of minimum wages are that teenagers may be driven into part-time, part-year employment (Gramlich, 1976), and young workers may be forced to accept offers in cyclically sensitive occupations and industries (Welch, 1974). Goldfarb (1975) provided a comprehensive summary of the vast and decidedly technical literature on the effects of minimum wage legislation.

Minimum wage legislation has attracted so much attention from economists because the issues surrounding it are so amenable to explanation by standard economic theory. There are supply, demand, and prices (wages), and, accordingly, the powerful machinery of microeconomics can be used extensively. However, the minimum wage issue in youth employment may not be as crucial as the number of pages written about it might suggest. Gramlich (1976) noted that the minimum wage is really no higher than in the 1950's compared to other wages because of the insidious effects of inflation on real income. Also, the Fair Labor Standards Act allows 15 percent less than the minimum to be paid to youths under special circumstances. During 1976, 700,000 young workers were granted certificates allowing them to work for wages less than the prevailing minimum (United States Department of Labor, 1977). Moreover, many youths already receive less than the minimum wage because they are part of the 15 percent of the work force employed in industries not covered by the Fair Labor Standards Act. Considerable non-compliance, often with mild punitive consequence, with this Act is common. Ashenfelter and Smith (1974) estimated that non-compliance may reach as high as 30 percent.

Discrimination

Some youth labor market difficulties have been attributed to discrimination by employers against the hiring of youth. By discrimination is meant a seemingly irrational reluctance to hire youths even though their potential productivity may be promising. Using theory developed by Becker (1971), the welfare of employers may be shown to be lowered by their discriminatory practices toward youth because a worker actually may be hired in place of a youth whose productivity is lower than the youth's could be. The main problem in understanding employer discrimination as a barrier to youth unemployment is in defining "irrational reluctance to hire". Actual reluctance to hire young workers may be based on an honest, yet informal, calculation by the employer of the tangible and intangible costs and benefits of hiring a youth.

Friedlander (1972) found that personnel workers often assume that youths (blacks, in particular) make unstable, high-risk workers. As a result, these officials frequently exaggerate the requirements for formal education and training (and, thereby, age) as a means of discouraging youthful job seekers. Berg (1970) reported that many minority youths with a high school diploma had employers tell them that they lacked adequate education for blue collar jobs. Wallace (1976) had teenage black females apply for jobs and record their experiences. Evidence of employer discrimination emerged from these records, but the sample of applicant/employer interactions analyzed was small. Gavett (1970) found that a majority of employers in eight major cities were reluctant to hire people under 20 years of age for full-time jobs. Employers rarely cited wages as a factor in not hiring youths, mentioning instead complicated safety regulations and uncertainty about youth turnover in a National Committee on Employment of Youth (1975) study. Whether this reluctance of employers to hire youth is "irrational", and is therefore discriminatory, is not clear from these studies. Note that the definition of discrimination applied here is economically, rather than legally, based.

Cannot Find Jobs

Lack of ability to find jobs that are available is often given as another reason for youth employment problems, although Becker (1979b) has noted that there is a paucity of data available to examine this problem directly. Datta (1975), Parnes (1975), and Parnes and Kohen (1975) have suggested that youths lack information about career alternatives, feel a need for more information, and vary in the amount of information they have by socioeconomic status, race,

urban versus rural status, age, gender, and intelligence. Saunders (1974), using data from the National Longitudinal Surveys of Labor Market Experience, observed that young job seekers searched for jobs through friends and acquaintences, while older workers used more formal means such as job applications directly to employers. Young job seekers with high scores on a scale measuring knowledge of the world of work showed less tendency to use informal means of job search. Many youths lack functioning job referral networks and contacts (Becker, 1977, 1979a; Parnes & Kohen, 1976; Wallace, 1976).

Difficulty in job seeking is especially a problem for rural youth because rural labor markets are organized poorly, making the match between young job seekers and employers difficult (Marshall, 1974). Union referral halls and newspaper want ads also are non-existent in many rural areas. Services by public and private agencies designed to provide labor market information also function poorly in rural areas.

Wegman (1979) suggested, after a review of job search training programs, that job finding skills can be improved among youths, and that improvement of job seeking skills can be a cost-effective way to reduce frictional unemployment, dependence on transfer payments, and job mismatch among youth. Wircenski, Passmore, Emshoff, Ay, and Kulahci (1981) assembled a wide range of resources useful for improving the job search skills of disadvantaged youth.

Legal Barriers

A variety of laws and regulations constrain employment opportunities of youth (see National Commission on Employment of Youth, 1975, and Trattner, 1970, for a bibliography and sources of public laws). Child labor laws are diverse among the States, and the effects of these laws on youth employment generally are not quantifiable. However, Mitchell and Clapp (1978) used United States Census of the Population and Housing data from high school dropouts to infer that child labor laws restrict youth employment. According to Kalachek (1969), among the myriad of barriers to youth employability are laws and regulations concerning school attendance, job health and safety, overtime hours, trade union restrictions, and seniority privileges. Gellhorn (1956), Rottenberg (1962), and Shimberg (1973) have catalogued the restrictive effects of occupational licensing requirements that affect youth employment.

Many of these legal barriers to youth employment were erected originally to protect youth; on the other hand, others were established deliberately

to restrict the supply of labor (and, therefore, to raise its price). For instance, the requirement to outlay large amounts of capital for licensing in some occupations hardly can be justified. Few youths have the large amount of cash necessary to acquire a cab license in New York City.

Mismatch of Residence and Job Location

Kain (1968) made popular the hypothesis that the suburbanization of jobs was the cause of joblessness among inner city youth. This hypothesis generally has received little empirical support. Analysis contained in the 1978 Employment and Training Report of the President (United States Department of Labor, 1979) showed that geographically distributing the black equally with white teenage population would have reduced unemployment of black youth during 1977 only from 40 to 35 percent. Harrison (1974) provided data to show that employment growth within occupational and industrial categories in central cities kept pace with suburban job growth (see also: Fremon, 1970; Friedlander, 1972; Westcott, 1976). Offner and Saks (1971) also asserted that black youths might have an edge over whites on employment in central cities due to market consciousness among retail store owners who understand the demography of their clientele.

Alternatives for Policy Formulation

Well, well. Many facts but few clues are present to point to policies that should be pursued to improve youth employability. A Sherlock Holmes is needed to, as Holmes would have put it, separate the essential from the accidental. But, I am just a poor Dr. Watson fumbling with the scraps of evidence that I have summarized on previous pages. But, I do not feel alone in my inability to extract solid policy directives from the youth employment literature. I am in company with many of the authors of papers in final reports of the Vice President's Task Force on Youth Employment (1980a, 1980b, 1980c) and of previous attempts to synthesize this literature. By comparison, though, Holmes had simpler mysteries to unravel in ten pages or so. Rather, at this bottleneck, I offer two alternatives for formulation of youth employment policy: a focus on reasons for action on youth employment; and, a focus on sufficiency of strategies for improving youth employability.

Focus on Reasons for Action

Consider the following analogy. The need to treat human disease is recognized by observing the consequences of the disease. The cause of a disease generates little more than academic interest unless the disease has serious consequences. The agressiveness with which rashes or cancers are treated depends

upon whether they are likely to have a fleeting effect on health or, instead, produce serious, even fatal, results. In the same manner, the consequences of youth employment problems for subsequent adult welfare need to be determined to warrant their reduction through use of public funds.

Just what sort of evidence, then, would be needed to examine the consequences of youth unemployment? Evidence is needed on the private and social costs of youth unemployment, from aggregate and individual perspectives. In the aggregate, the 1979 Employment and Training Report of the President (U. S. Department of Labor, 1980, pp. 76-77) noted that society loses the potential output unemployed youths could create. Their idleness reduces their personal and family incomes, with an unknown effect on government outlays for such transfers as food stamps and public assistance payments (see also Brenner, 1980). A comprehensive accounting of these private and social costs in the aggrregate would aid appreciably in the debate over the consequences of youth joblessness.

An even more important question might be what are the long-term effects of youth labor market problems on measures of subsequent adult welfare? Evidence is only beginning to emerge, mostly from analyses of longitudinal data, on the significance of youth unemployment for adult life. Stevenson (1978) found that adult employability and earnings are related positively to opportunities to gain work experience while young. Coleman (1976) and Freeman (1976) stressed the importance of work while in secondary school on future employment. And, Stephenson (1979) showed that work during secondary school was associated with lower rates and shorter periods of post-school joblessness among young men and women studied in the National Longitudinal Surveys of Labor Market Experience.

One serious methodological problem is presented in studies of the consequences of individual youth unemployment, however. Suppose those unemployed while young are unemployed more frequently as adults. One explanation is that early unemployment had a genuine behavioral effect on individuals. Heckman (in press; see also, Flinn & Heckman, in press) called this state dependence; that is, status at one time depends on status at a previous time. Another explanation, labelled heterogeneity by Heckman (in press), that can be offered is that these individuals are merely members of racial or other groups that experience high unemployment persistently--unaltered or "unscarred" by their previous labor market problems.

Tuma, Hannan, and Groenveld (1979) provided methods for distinguishing heterogeneity from state dependence, and Stephenson (1979) has applied these methods in his study of the consequences of work experience while in school. This methodological problem is quite common in a variety of research areas (cf., Singer & Cohen, 1979, for a study of this problem with data on malaria incidence and recovery). The methodological advances for the treatment of this problem will need to be introduced into any serious study of the consequences of youth employment.

Focus on Sufficiency of Strategies

The disease analogy can produce additional insights into youth employment policy formulation. Once the seriousness of the consequences of a disease are known, the causes of the disease do not always need to be known to treat its effects. For example, the cause of a cancerous growth may be unknown, but radiation or chemical therapy may reduce the size of a malignant tumor. Likewise, the causes of youth employment problems need not be parsed perfectly if, instead, the effectiveness of various treatments of this problem can be determined. This suggests that a vigorous evaluation of various strategies--including forms of vocational education and training--would be useful. The review and synthesis of the effects of participating in vocational education produced by Mertens, McElwain, Garcia and Whitmore (1980) would be helpful in considering of sufficiency of vocational education strategies for treating youth labor market problems.

This approach, however, is less than satisfying. As anyone involved in program evaluation knows, data unambiguously fingering the superiority of any strategy for action are rare, indeed. Also, considerations of and responses to program evaluation data tend to be ad hoc, and rarely is overarching synthesis of evaluation outcomes capable or attempted. Taggart (1980) assessed the state-of-the-art in using evaluation data to formulate youth employment policy:

> After more than a decade of experimentation with employment and training programs for youth, however, the magic formulas for assessing needs and prescribing services remain elusive. Further work might yield greater specification, and this is certainly critical, but the problem is fundamentally one of the diversity

> of youth and the difficulty of looking into their future. Uncertainty will be a fact of life for some time, and it may well be that there is no Rosetta Stone. (p. 135)

Summary

This brief review of literature on barriers to youth employment found the following factors to be vaguely, equivocally, and, in some cases, modestly related to the employability of youth: the size of the youth population, technical, personal/social, and basic skill level; attitude toward work; minimum wages; discrimination by employers; job search skill; legal restriction; and mismatch of residence and job location. The policy content of this literature is dismal. Two alternatives to formulations of youth employment policy were described. First, a focus on the reasons for action against youth employment problems would highlight any serious consequences of these problems. Then, any need to treat these problems aggressively would be clear. Second, a focus on the sufficiency of strategies available currently for treating youth employment problems would highlight what seems to work and for whom. Although the history of social and educational program evaluation is not filled with unambigious, direct, "what we should do tomorrow" statements, a vigorous evaluation of strategies may be the most promising youth employment policy formulation method available.

Oh, by the way, remember the cigar and five bucks? Well, Sherlock, they still are waiting to be claimed. You know where to find me.

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Ethnographic Methods for Exploring the Education/Work Nexus

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Ethnographic Methods for Exploring the Education/Work Nexus

> Man is the measure of all things; of those that are, that they are; and of those that are not, that they are not.
>
> --Protagoras

A story, true or not, circulated among my graduate student cronies at the University of Minnesota about an explanation of discriminant analysis by a particular professor of statistics. The professor described--at length, and with mathematical lemma, matrix algebra, and computer printouts--how the gender of ducks could be predicted using various habits and feather characteristics of the ducks. He even provided an empirical example showing the gender of a certain set of ducks estimated with 67 percent accuracy using discriminant analysis methods. Finally, an obviously agitated agriculture student popped out of his seat. "Professor," he said, "I don't think you're going about this right. You don't need computers and you sure don't need discriminant analysis to tell whether a duck's a boy or a girl. Why, at home we just turn 'em upside down."

What we know cannot be separated from how we know it. For instance, to assert that participation in vocational home economics is beneficial for adolescents begs questions about how this is known. Historical, normative, political, survey research, anecdotal, or experimental analyses of this assertion might yield different results. Different analysts using the same general approach might arrive at different conclusions. And, varying conceptions of vocational home economics, the domain of its benefits, and its social function certainly would color the results of any methodology used. But, these differences are not causes for despair, for knowing is decidedly, and thankfully, a human act. No convenient operations research algorithm exists to synthesize differences in results from various approaches to research problems. Nor is such a simple-minded deus ex machina likely to appear. Individuality, and the joy and beauty it creates at times, will continue to creep into all aspects of research problems. As the poet, Gerard Manley Hopkins, exclaimed in his Pied Beauty, "Glory be to God for dappled things"!

The pendulum of respectability, however, swings quickly and with a wide arc over research methods. A ground swell of reaction has appeared recently against normal social science research methods. Bronfenbrenner (Note 1), for

instance, characterized contemporary research in developmental psychology as, "the science of strange behavior of children in strange situations with strange adults" (pp. 1-2). And, Cazden (1975) considered most behavioral research to be "contrived encounters," devoid of natural content and significance. Moreover, many reviewers have reacted against a tendency to use "quantification as camouflage" (Andreski, 1972, Ch. 10) by rejecting statistical approaches to research problems as embodying errors in misplaced precision. These reactions bring to mind the visit of the great mathematician Euler to the court of Catherine II of Russia during which the existence of God was argued. Euler asked for a blackboard, upon which he expanded a polynomial and followed with, "therefore, God exists." His argument was accepted because no one was willing to confess their ignorance of his mathematics.

Ethnographic methods have been sported about as one alternative to research based heavily on statistical and experimental design artillery. In its root sense, ethnography means a "picture of people" (Wolcott, 1975), or, as stated simply by Erickson (1979), "a way of systematically learning reality from the point of view of the participant" (p. 2). The remainder of this essay contains a brief description of distinguishing features of ethnographic approaches to research problems, along with a discussion of education and work connections that could be illuminated through ethnographic methods. Hymes (1977), Patton (1980), and Wilson (1977) provided useful reviews of ethnographic techniques for educational research. Bibliographies of ethnography in educational research are found in Boruch (1978), Burnett, Gordon, and Gormley (1974), Kaplan, Galbreath, and Vargas (1980), Lindquist (1971), Rosentiel (1977), Smith (1978, p. 324), and Wolcott (1972).

Distinguishing Features

Four features distinguish ethnographic from other research methods: (a) the researcher is considered as an instrument of the research; (b) research is guided by an inductive, serendipitous, holistic perspective of the research problem and process; (c) research methods are designed to be used *in situ*, that is, in the natural setting in which the human behavior of interest to the researcher is occuring; and (d) the results of ethnographic research often lack the capacity to startle their consumers because these results frequently take on a commonplace character and tone.

Researcher as Instrument

Much of the body of research on education and work has attempted to mimic physical science models. Use of experimental methods, quantification of social

facts, reduction of these facts to statements of lawful relationship through statistical methods, and a cool, objective separation of the researcher from the research problem characterize this mimicry. Ethnography, in contrast, grew from the phenomenology movement which asserts that, "the social scientist cannot understand human behavior without understanding the framework within which the subjects interpret their thoughts, feelings, and actions" (Wilson, 1977, p. 249). One consequence of this belief is that ethnographers seek to develop "empathetic [sic] understanding of reality as seen by subjects" (Rist, 1977, p. 42) by total immersion in the research setting. For Erickson (1977), this immersion requires "hanging around and watching people carefully and asking them why they do what they do, sometimes asking them in the midst of their doing" (p. 58).

The use of the researcher as an instrument of research is the sine qua non of ethnographic research methods. At times, this requires that the researcher live or work in the research setting. One by-product is that the researcher probably will develop friends and enemies in the research setting as a natural consequence of the process of building rapport with research subjects. Perhaps such personal involvement would not be necessary if what Pelto (1970) called "etic", rather than "emic", information were sought. By "etic" Pelto meant standardized measures of phenomena such as "annual income from wages and salaries". However, "emic" information, such as "the meanings of money for status and well-being in this social group", must be considered from a functional point of view of actors in everyday life. Of course, involvement in the research setting gives rise to a host of ethical concerns, considered by Cassell (1980), and can lead to emotionally distressing choices for the researcher (Wacaster & Firestone, 1978).

Obviously, particular tastes and skills must be present in a good ethnographer. According to Wolcott (1975), ethnographers must be sympathetic, skeptical, objective, and inordinately curious, and must possess physical stamina and emotional stability combined with personal flexibility. Some of these tastes and skills can be acquired. Johnson and Gardner (1979) described and evaluated positively a prototypical program for selecting and training classroom ethnographers. Peshkin (1968) has described methods for the ethnographer to use trained observers in field work. Nevertheless, the quality of the knowledge produced through ethnographic field work must depend undeniably on the chancy fit between the researcher and the subjects of research.

"The Truth is the Whole"

The notion that "the truth is the whole"--to use an expression of the philosopher Hegel--distinguishes ethnographic from other methods for research. Rather than relying on one or two indicators of phenomena in a research setting, the ethnographer may assemble any sense data that are produced. These may include artifacts, rumors, non-verbal behavior, pictures, and perhaps even formal psychological or sociological assessments. This notion also forces the researcher to see the interconnectedness of things. For instance, an ethnographer studying religion will become involved quickly in economics, kinship structure, mythology, and ethics. Legal structure cannot be separated from conceptions of family, friendship, and property. All aspects of culture are so tightly bound into a mass of social string that pulling one loose end is bound to have an effect on the others.

Accordingly, ethnographic work uses inductive rather than deductive processes to apprehend the truth in a research setting (see Kimball, 1955, for an exposition). Also, as might be expected, the serendipitous effects of observing in the right place at the right time can produce large, discrete leaps in understanding of the human behavior studied. For instance, one big classroom fight might tell the ethnographer more about social status among youths being studied than 100 days of careful recordings of verbal interactions. As described by Foster (1969), the ethnographer is asking constantly, "What is going on here?" rather than the quantitative social scientist's question, "What can I demonstrate about the relationship in this situation of certain variables I have conceptually abstracted and for which I have developed precise instruments of measurement?" (p. 60).

In Situ Research Methods

Ethnographic methods are designed to be applied by a researcher present in the research setting to capture relevant ethnographic data. Specific techniques for participant observation and in-depth interviewing in field work were detailed in Bruyn (1963), Donovan (1975), Nelson (1977), Ponland (1972), and Schumacher (1979). Erickson (1977) presented a useful general taxonomy of ethnographic research methods that assists in the organization and understanding of specific techniques that could be used.

Erickson (1977) described three levels of ethnographic methods:

1. textual analysis of ethnographic reports. The researcher enters the research setting with no preconceived biases about what to expect. Experience

and information are soaked through methodological sponges of field notes, documents, elicited texts, demography, unstructured interviews, and the like. Then, after long and careful observation, key incidents are described in terms functionally relevant to research subjects, and these incidents are placed in relation to a larger social context of the culture observed. A classic example of this method was demonstrated in Whyte's (1955) Street Corner Society in which the operation of Italian street gangs was documented.

2. ethnographic monitoring. Proponents of this general method recognize that people enter research studies with a notion of what is important to investigate. There may be specific theories or hunches that are followed; or, there may be previous research experience which would be foolish to ignore. So, rather, than pretending that nothing is known about the research situation, research begins by examining particular factors. For example, the quality of teacher/student interactions may be the sole focus at the beginning of research on classroom achievement because of notions that communication difficulties in this context resulted in lowered levels of achievement for some students. The research may change direction after additional evidence is accumulated; however, the most probable aspect of the situation is examined first.

3. studies grounded in cognitive theory of culture and social competence. Goodenough (1971) defined culture as a system of "standards for perceiving, believing, evaluating, and acting" (p. 41). Emphasis is not on behavior, but on knowledge necessary to produce behavior. The structure of a culture, then, is inferred from what the members of the culture consider to comprise social competence. A latent factor such as social competence is not something that you merely ask people about; rather, social competence must be inferred from social performance. In their social performance, people construct and test "emic" models of the world and, in turn, are socialized into the culture by others constantly. In their social performance, people show the existence of cultural norms and boundries through their uses of unwritten rules of behavior (or, exceptions to them) which form the basic datum of the ethnographer's analysis. Ethnographers with this methodological point of view do their work by watching people and asking them what they are doing and why they are doing it. Special attention is paid to language by ethnographers of this persuasion because language, for these ethnographers, holds the symbolic content that defines culture (see Frakes, 1968).

"The temptation to form premature theories upon insufficient data," remarked Sherlock Holmes to Inspector MacDonald in The Valley of Fear, "is the bane of our profession." Good ethnography relies on the quality of fallible, albeit trained, people who observe, record, and, then, synthesize evidence at hand (Feinberg, 1977; Miles, 1979), often with inadequate time allowed for the synthesis (Tikunoff, Berliner, & Rist, 1975). Unfortunately, these are skills few people have mastered, or, if possessed, can maintain without persistent practice. And, without constant diligence, people easily can fool themselves into seeing only what they want to see. Remember the celebrated horse, Clever Hans, who, until his owner's non-verbal cues were discovered, was thought to be capable of amazing feats of intelligence, including a comprehensive knowledge of written German (Pfungst, 1911)? Ethnography seems to be among the most human of the social sciences; consequently, ethnographers have developed ways to examine the fallibility of their phenomenological impressions. Papers by Becker (1953), Dean and Whyte (1958), McGoodwin (1978), and Orenstein (1971) provide excellent introductions to the literature on the reliability and validity of ethnographic data.

Science of the Commonplace

For part of a year, I worked as a consultant for a Washington-based group that provided technical assistance for CETA prime sponsors. This group had let a contract for an ethnographic study of problems in implementing youth training programs within local government structures. High hopes were expressed for the possibility that the study would yield a fresh, insightful, and even radical look at CETA problems. For many, though, the study failed to live up to its expectations. Intermediate reports from the project told us things like: staff turnover kept many CETA programs from actually being implemented; or, many staff members were not prepared adequately to manage a big dollar training program. "For stuff like this," many people said, "we paid money?"

Apparently, this is a common reaction among consumers of ethnographic research findings. Karabel and Halsey (1977, p. 55) asserted that, even though the ethnographic approach is novel, its results often are banal. Heyman (1980) retorted that, yes, ethnographic research findings frequently do seem stale and vulgar, but, for the greater part, the atoms of evidence in an ethnographic study are common behaviors from regular human experience. In light of this, we should be made wary, indeed, by conclusions from ethnographic research that startle, that violate our common sense, that seem to go beyond logic.

What is the value added by ethnographic methods, then? These methods add a certain rigor to our summaries from personal experience by certifying the replicability, generality, and cultural importance of this experience.

Potential Applications

Described briefly in this section are some sticky research problems related to the education/work connection for which ethnographic methods might provide a fruitful alternative to common research methodology. The problems listed do not include all possible problems for which these methods might yield interesting results. Instead, this listing merely is meant to illustrate the applicability of ethnographic methods to research in education and work.

Skill Acquisition

What means of skill acquisition is most effective and efficient? For whom? Are skills best learned on the job so that firm-specific behaviors can be used? Or, is formal schooling the best route to development of job competencies? These questions have been debated heatedly, with little research evidence to feed the fire. McLaughlin's (1979) anthropological study of the acquisition of mechanic's skills in Ghana stands as an example of how ethnographic data could enrich our understanding of the answers to these questions.

Skill Adaptability

Many analysts have taken the high inter-occupational mobility of American workers (see Sommers & Eck, 1977) to mean that there is high adaptability of skills among many occupations. Bolstering this view is evidence from economic analyses showing elasticity of substitution among labor inputs to production (Bowles, 1969; Dougherty, 1971; Parnes, 1968). What aspects of various jobs are adaptable to what other jobs? How do workers and their employers facilitate these adaptations? Does adaptability of skills depend upon the skill level of occupations as the evidence from the demographic and economic analyses might suggest? Ethnographic analysis of these questions would aid in the design of education for adaptability of skills among occupations.

Employer Preferences

Just what do employers want in young workers? Technical skills? Positive work attitudes? The ability to read, write, or cipher? Most frequently, these questions are answered by administering questionnaires to employers. A well-known fact in occupational research is that employers' actual practices frequently are at odds with what they say they do. Ethnographic analyses of skill requirements for entry-level work would aid in the understanding of the nature of employers' needs.

Employability Problems

A wide variety of opinion and empirical data exists on barriers to youth employment. For example, some demographers see youth population trends dominating youth employment trends. Some educators point to attitudinal, technical, and basic skills deficits as roots of youth employability problems. Some economists resort to explanations based in market failures or imbalances such as restrictive minimum wages or imperfect information about labor markets among employers and youths. The majority of this evidence has been accumulated from longitudinal surveys, censuses, and other indirect analyses of youth labor markets. Would an ethnographic study of youths conducting a job search help to reveal the role of many of these factors in youth employability? Would an ethnographic study of youth in occupations and industries dominated by youth (McDonalds? Dairy Queen?) reveal the nature of some of the job turnover problems experienced by youth?

Goals of Training

Most people consider vocational education conducted at the public expense as education for work. They expect, therefore, to be rewarded for their investment with high job placement rates in occupations related to students' training. However, in a free society, vocational program completers can choose to work, and, if they work, can accept any job offer they choose. Perhaps there are some students who enroll in vocational education purely for consumptive reasons--that is, they enroll for immediate pleasure that enrollment provides, or for future non-market benefits from enrollment. For instance, how many teenagers enroll in specific vocational programs of study because their friends do? How many students enroll in cosmetology who have no intention of selling these skills on the labor market, but, instead, will use these skills for their own, friends', and families' benefits? The intentions of these students is of paramount importance in understanding raw job placement statistics. Ethnographic methods are suited uniquely to the study of these motives, intentions, and plans.

Effects of Education for Work

Most of the studies of the effects of participating in vocational education reviewed by Mertens, McElwain, Garcia, and Whitmore (1980) can best be classified as status or associational studies. These are studies in which variables are not, or cannot be, manipulated to allow the effects of their systematic, planned variation to be observed on some dependent variables. Causal

interpretations cannot be drawn from such studies. Mail surveys of former vocational students are typical of these types of status and associational studies. The inability to detect vocational education as the cause of labor market behavior in these studies makes them shallow in policy content. Ethnographic studies of former students in actual jobs might help to uncover the contribution of vocational education to productivity.

Concluding Remarks

The aim of this paper has been to provide a sketch of the distinguishing features and potential applications of ethnographic methods to research on the connection between education and work. These qualitative methods could complement research efforts based on quantification and experimentation. As with the choice of guns when hunting elephants or squirrels, the appropriate research method must be chosen to fit the problem considered. Some methods are better for some types of problems. Ethnographic methods are an underused portion of the arsenal for research in education and work.

A mention of ethnographic methods is considered de rigueur by many people now that these methods have begun to receive greater attention than in the past. After reading several regression equations I had calculated concerning youth unemployment, a student droned with Dietrich-like nasality, "I mean, you can't really mean. . .like. . .you know. . .those numbers, for kids, can you. . .you know?" Well, yes, I can, you know. Many approaches to research problems will be needed to create the knowledge we need to improve youth transition to work--that is, adulthood and responsibility. The ethnographic approach should be examined beyond its faddish attractiveness.

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Chances of Previous Work Experience Among Unemployed Youth

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Running head: Previous work experience

Chances of Previous Work Experience Among Unemployed Youth

Adult employability and earnings are related positively to opportunities to gain work experience while young (Stevenson, 1978). Coleman (1976) and Freeman (1976) have stressed the importance of work while in secondary school on future employment. Stephenson (1979) found that work during secondary school was associated with lower rates and shorter periods of post-school joblessness among young men and women studied in the National Longitudinal Surveys of Labor Market Experience (see Parnes, 1972, for a description of these surveys). Recent CETA youth pilot programs and high school cooperative education programs have been based on the idea that work experience during early formative years in the labor market is desirable.

Examined in this paper is the relationship between the chances of previous work experience and the personal characteristics of unemployed 16- through 24-year olds in the civilian, noninstitutional population of the United States during March 1979. This information was derived from an analysis of 2087 records from the 1979 Annual Demographic File prepared from the March 1979 Current Population Survey (CPS) by the U. S. Bureau of the Census. Briefly, gender, race, marital status, being 18 or 19 years old rather than 20 through 24 years, veteran status, and educational attainment were related, by themselves, only slightly to whether unemployed youths ever worked full-time for pay for two or more weeks. The chances of previous work experience were about 20 percent lower for 16- and 17-year olds than for 20- through 24-year olds. Based on unpublished CPS population estimates for March 1979,[1] about 76 of every 100 of of the 2.8 million unemployed youth, 16 through 24 years old, had worked for pay for at least two weeks some time in their lives.

Contained in the next section of this paper is a description of data used to consider the correlates of previous work experience among United States youth, followed by a statement of the methods of analysis used to treat these data. After the results of this data analysis are displayed, implications of this analysis for policy and additional research are discussed. Last, a summary is provided, and references are cited.

Methods

Data

Data examined in this study were generated through the March 1979 CPS. The CPS is a monthly household sample survey conducted by the U. S. Bureau of

the Census to provide estimates of the size and distribution of employment, unemployment, and other characteristics of the civilian, noninstitutional population of the United States. About 56,000 households were selected and surveyed for the March 1979 CPS, producing data on over 120,000 persons who were 16 years of age or older. March 1979 CPS data from 2087 unemployed 16- through 24-year olds were selected from the 1979 Annual Demographic File (see U. S. Department of Commerce, Note 1) for research reported in this paper. A detailed technical description of the CPS sampling frame and methods, data collection and processing, and population estimation was provided by the U. S. Department of Commerce (1978). The Annual Demographic File is available for use by interested researchers through the U. S. Bureau of the Census, Customer Products Division, as well as through a variety of commercial vendors. The data extracted from the Annual Demographic File for this study can be obtained from the authors on a requestor-provided magnetic tape.

The March 1979 CPS sample contained 1604 unemployed youths who had worked full-time for pay for more than two weeks during their lives. The remaining 483 unemployed teenagers and young adults reported that they never worked for pay. The research reported in this paper attempted to determine the distinguishing personal features of these 1604 experienced unemployed youth, compared to the 483 persons who were unemployed and without previous work experience.[2]

Analysis

Using a binomial logistic model as shown in equation 3.1 of Walker and Duncan (1967), gender, race, marital status, age, veteran status, and educational attainment were regressed on a dummy criterion variable indicating whether an unemployed youth ever worked two or more weeks for pay prior to the March 1979 CPS survey reference week (see Harrell, 1980, for documentation of a computing routine for this type of regression). The logistic specification restricts the estimated probability of previous work experience to range between zero and positive one. Ordinary least squares regression on a nominally-scaled criterion variable can produce estimated values outside this range, and, because such a qualitative variable is not distributed normally, will not be fully efficient in a statistical sense (Theil, 1971).

Gender entered the statistical model as a dummy variate (if male, or not) as did race (if caucasian, or not), marital status (if ever married, or not), and veteran status (if ever served in Armed Forces, or not). To determine the unique patterns of previous work experience among teenagers and young adults,

two dummy variates were specified to account for age: one variate indicated whether a CPS sample member was 16 or 17 years old; another variate indicated whether a sample member was 18 or 19 years old. The reference group for these two age variates was the 20- through 24-year old category. Educational attainment entered the model as integer years of schooling completed. The only years of schooling counted were those spent in graded public, private, or parochial elementary and high schools, colleges and universities, and professional schools, whether day schools or night schools. The criterion variable and variates were measured through face-to-face or telephone interviews with a responsible member of each CPS sample household (see Borus, Mott & Nestel, 1978, for a discussion of possible response errors embodied in this choice of respondent; see also U. S. Department of Commerce, 1968, and U. S. Department of Labor, 1976, ch. 11, for discussion and estimation of errors and biases in these interview data).

Coefficients for each variate in the binomial logistic function fit to these data are reported and interpreted in the next section of this paper.

Findings and Discussion

Results are shown in Table 1 of the regression of personal characteristics of unemployed 16- through 24-year olds on whether they ever worked for pay for two or more weeks prior to March 1979. For the interested reader, footnotes to Table 1 document many technical details and intermediate results of this analysis. According to the raw data, about 76 of every 100 sample members had previous work experience; the average chance of previous work experience calculated through the statistical model used in this study was about 82 out of 100. Therefore, the personal characteristics examined in this study overestimate slightly the chances of previous work experience among unemployed United States youth.

Insert Table 1 About Here

Holding constant all variates at their mean values, gender, race, marital status, veteran status, and educational attainment were related, by themselves, only slightly to the incidence of previous work experience during the CPS reference period. The chances of previous work experience were about 2 out of 10 lower for 16- and 17-year olds than for 20- through 24-year olds. This

multivariate outcome for March 1979 is consistent with work experience trends by age among youth between 1966 and 1978 (U. S. Department of Labor, 1979, Table B-15).

If, as shown in previous studies (Stevenson, 1978; Stephenson, 1979), lack of work experience among youth foreshadows later labor market problems, then data from this study substantiate that 16- and 17-year olds are more likely to suffer from this deprivation of experience, independent of their gender, race, marital status, veteran status, and educational attainment. But, is any sort of work experience better than none? According to Andrisani (Note 2), unfavorable labor market experiences among youth are associated with a deterioration of positive attitudes toward work. Work experiences structured with educational objectives in mind might be more useful in the long-run than work found and experienced haphazardly; however, this is a researchable point.

Perhaps, rather than focusing on previous work experience as a criterion variable, more fruitful research might be conducted on the consequences of lack of work experience in the style of Stevenson (1978) and Stephenson (1979). In other words, the incidence and quality of work experience might be a variate useful in explaining differences observed in a wide range of measures of adult well-being. Then, additional and more definite information could be provided for planners and policy-makers for vocational education and employment and training programs concerning the necessity of providing work experiences for youth to combat subsequent adult labor market pathologies.

Summary

About 76 of every 100 youths, aged 16 through 24, unemployed during March 1979 had previous full-time work experience for pay lasting two or more weeks. Regression analysis of data from the March 1979 Current Population Survey revealed only slight differences in the incidence of previous work experience among unemployed youth by gender, race, marital status, veteran status, and educational attainment. The chances of previous work experience were about 20 percent lower for 16- and 17-year olds than for 20- through 24-year olds. These data support the need, identified in other studies of youth labor markets, for improving the opportunities and quality of work experience for youth. More research is needed on the consequences of lack of work experience so that additional information can be provided for policy-makers and planners regarding the necessity of work experience for youth.

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Footnotes

1/ Estimated by applying CPS sampling weights to data from unemployed 16- through 24-year olds in byte 48 of the "person" records in the 1979 Annual Demographic File.

2/ Unweighted data from the 2087 unemployed 16- through 24-year old CPS sample members were analyzed in this study. Ratio estimates of U. S. youth population figures can be constructed from CPS sample data by multiplying each sample member's data by a unique sampling weight provided in the Annual Demographic File. However, multivariate analysis of the resulting weighted data is difficult.

Table 1

Relationship Between Chances of Previous Work Experience and Personal Characteristics Of Unemployed 16- Through 24-Year Olds in the Civilian Non-institutional Population of the United States During March 1979

Characteristic	Sample Mean[a]	Unstandardized Coefficient[b],[c]	Chances of Previous Work Experience[d]
Gender			
male	0.532	0.590*	0.05 out of 10 greater, if male
female	0.468	rc	
Race			
caucasian	0.776	0.463*	0.39 out of 10 greater, if caucasian
non-caucasian	0.224	rc	
Marital Status			
ever married	0.218	1.240*	0.78 out of 10 less, if ever married
never married	0.782	rc	
Veteran Status			
veteran	0.049	-0.456	0.67 out of 10 greater, if a veteran
non-veteran	0.951	rc	
Age			
16 or 17 years	0.263	-2.068*	1.84 out of 10 less, if 16 or 17 rather than 20 to 24 years
18 or 19 years	0.254	-1.012*	0.83 out of 10 less, if 18 or 19 rather than 20 to 24 years
20 to 24 years	0.483	rc	
Educational Attainment	12.153	0.113*	0.37 out of 10 less, if 10 years rather than mean 0.27 out of 10 greater, if 14 years rather than mean

Source: Estimated from binomial logistic regression of data on incidence of previous work experience for 2087 teenagers and young adults in the 1979 Annual Demographic File assembled by the U. S. Bureau of the Census from the March 1979 Current Population Survey.

[a] Mean values for dummy variates are the proportions of sample members in categories.

[b] Estimated by solving for $\hat{\beta}_j$, as shown in section 4 of Walker and Duncan (1967), where, for person i, $P[exp]_i = [1 + e^{-\alpha + \sum_j (-X_{ij}\hat{\beta}_j)}]^{-1}$ and $\hat{\beta}_j$ is the unstandardized coefficient for variate j $P[exp]_i$ is the probability of previous work experience for person i, α is an intercept term, X_{ij} is the value on variate j for person i, and e is the base of natural logarithms.

[c] The value of the intercept term is 0.080. The fit of the model to the data is indicated by a chi-square value of 1837 which, with 6 degrees of freedom, is well beyond conventional critical values. This chi-square value is twice the difference in the log likelihood for the model with all variables from the likelihood based on a model containing the intercept only (see Harrell, 1980, p. 83).

[d/] Estimated through two major steps. First, the average probability of previous work experience, $\bar{P}[exp]$, was computed by substituting computed unstandardized coefficients and mean values for all variates into the equation in footnote b. Then, to estimate the chances of previous work experience associated with each dummy variate, $\bar{P}[exp]$ was computed again, but with the mean value for the reference category substituted for the particular variate under consideration. For example, $\bar{P}[exp]$ was computed with the mean value for females on the gender variate, but with mean values for educational attainment and positive categories for each dummy variate. This allowed the difference in $\bar{P}[exp]$ to be stated, given a difference, in this case between males and females, on the variate. In the case of educational attainment, $\bar{P}[exp]$ was computed for 10 and 14 years. Program code to conduct these operations is available from the authors for the TI-59 Programmable Calculator or, in PL/1, for the IBM 3033 computer under the MVS operating system.

[*/] These coefficients at least twice as large as their standard errors.

rc = reference category.

Chances of Job Loss Among Teenagers and Young Adults: Implications for Vocational Education and Training

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Chances of Job Loss Among Teenagers and Young Adults: Implications for Vocational Education and Training

Examined in this paper is the relationship between the chances of job loss and the personal characteristics of teenagers and young adults in the civilian, noninstitutional population of the United States during March 1979. This information was derived from analysis of 1898 records in the 1979 Annual Demographic File prepared from the March 1979 Current Population Survey (CPS) by the U. S. Bureau of the Census. Briefly, 16- and 17-year olds were found to be roughly twice as likely as 20- through 24-year olds to describe job loss as their reason for unemployment; veterans were about 1.5 times more likely than non-veterans. Gender, race, marital status, educational attainment, and being 18 or 19 years old rather than 20 through 24 years old were related, by themselves, only slightly to whether youths were unemployed due to job loss. These relationships were estimated by fitting a binomial logistic regression of these personal characteristics on a dummy criterion variable indicating whether youths described job loss, rather than any other factor, as the reason for their unemployment during March 1979.

To place the research reported in this paper into context, a brief description of youth unemployment experience in the United States, along with a discussion of the importance for planners and developers of education for work of understanding correlates of youth job loss, is contained in the next section of this paper. Then, data used to consider the research problem are described, followed by a statement of the methods of analysis applied to these data. After the results of this data analysis are displayed, implications of this analysis are listed for planning and developing education for work and for additional research. Last, a summary is provided, and references are cited.

Background

Unemployment rates among teenagers and young adults have been persistently higher than those of adults. Bowers (1979, Table 1) compared the unemployment rates of these age groups in 1955, 1965, and 1973. The overall unemployment rate was approximately the same during these years, minimizing the influence of the business cycle on these comparisons. The incidence of unemployment during these years was highest among teenagers between 16- and 19-years old,

followed by young adults between 20 and 24 years old, with the lowest rates for adults over 24 years old. Among teenagers, 16- and 17-year olds and non-whites have exhibited higher unemployment rates than 18- and 19-year olds and whites. And, over the years Bowers compared, racial and age differentials in unemployment widened. In addition, youth labor markets have been more sensitive to changes in economic conditions than have been job markets for adult males (Bednarzik & Klein, 1977, p. 4).

Reasons given by teenagers and young adults for their unemployment vary. Based on unpublished CPS data for March 1979,[1/] about 27 of every 100 of the 2.8 million unemployed 16- through 24-year olds lost their last job. Fifteen of every 100 quit their last job. About ten of every 100 teenagers and young adults were looking for work because they left school. About 23 of every 100 were classified as unemployed because they were seeking temporary work. Another 25 of every 100 young job seekers' reasons for their unemployment in March 1979 could not be coded.

Over the last decade, job loss has been the chief factor behind the unemployment of adult men and, along with labor force reentry, of adult women (U. S. Department of Labor, 1979, Table A-27). Gilroy and McIntyre (1975) found job loss to have been the reason for unemployment most influenced by cyclical fluctuations in the economy. The proportion of the total unemployed citing job loss as a reason for unemployment increased over 1979 from 41 to 45 percent; during the 1974-75 recession, that proportion rose as high as 57 percent (Leon & Rones, 1980, Table 4).

The recent focus of considerable activity among employment and training specialists and vocational educators has been on the planning and development of curricula and instructional systems designed to smooth the transition of youth from school to work roles (see, for instance, the large quantity and range of materials compiled by Wircenski, Passmore, Emshoff, Ay, & Kulahci, Note 1). Much of this planning and development activity seems to have been based on the assumption that deficiencies of personal/social skills and attitudes toward work among youth are major obstacles to finding and keeping a job (see Beach & Gideon, 1981, for a rationale for this position). Without challenging the assertion that the personal pathologies of youth are major reasons for their labor market difficulties (Bowles & Gintis, 1976, presented a different view), the research reported in this paper was designed to examine the

personal correlates of one portion of these school-to-work transition problems--job loss. An understanding of these correlates should help in focusing planning and development efforts on demographic groups most likely to be unemployed due to job loss.

Method

Data

Data examined in this study were generated through the March 1979 CPS. The CPS is a monthly household sample survey conducted by the U. S. Bureau of the Census to provide estimates of the size and distribution of employment, unemployment, and other characteristics of the civilian, noninstitutional population of the United States. About 56,000 households were selected and surveyed for the March 1979 CPS, producing data on over 120,000 persons who were 16 years of age or older. March 1979 CPS data from 1898 unemployed 16- through 24-year olds were selected from the 1979 Annual Demographic File (see U. S. Department of Commerce, Note 2) for research reported in this paper. A detailed technical description of the CPS sampling frame and methods, data collection and processing, and population estimation was provided by the U. S. Department of Commerce (1978). The Annual Demographic File is available for use by interested researchers through the U. S. Bureau of the Census, Customer Products Division, as well as through a variety of commercial vendors. The data extracted from the Annual Demographic File for this study can be obtained from the authors on a requestor-provided magnetic tape.

The March 1979 CPS sample contained 505 teenagers and young adults who ended their previous employment involuntarily and immediately began looking for work. The 1393 remaining unemployed 16- through 24-year olds reported that they voluntarily left their last job, were entering or reentering the labor force, or were trying to find temporary work only. The research reported in this paper attempted to determine the distinguishing personal features of these 505 job losers, compared to the 1393 persons who were unemployed for other reasons.[2/]

Job loss could have been due to discharge ("firing") or layoff from a previous job, although, unfortunately, this distinction could not be made from the CPS data. Also, the full extent of job loss in the youth population is underestimated by these data for at least two reasons. First, if another job was found shortly after a job was lost, then the CPS sample member was counted as employed rather than unemployed. Second, if no attempt was made to find a

new job, then the CPS sample member was classified as out of the labor force and not as unemployed. This pattern of flows between labor force states, especially between categories of unemployment and out of the labor force, is observed frequently (Clark & Summers, 1979) among youth.

Analysis

The probability of job loss was estimated using a binomial logistic function, as shown in equation 3.1 in Walker and Duncan (1967), to regress gender, race, age, veteran status, and educational attainment on a dummy criterion variable indicating whether youths described job loss, rather than any other factor, for their unemployment during March 1979 (see Harrell, 1980, for documentation of a computing routine for this type of regression). The logistic specification restricts the estimated probabilities of job loss to range between zero and positive one. Ordinary least squares regression on a nominally-scaled criterion variable can produce estimated values outside this range, and, because such a qualitative variable is not distributed normally, will not be fully efficient in a statistical sense (Theil, 1971).

Gender entered the statistical model as a dummy variate (if male, or not) as did race (if caucasian, or not), marital status (if ever married, or not), and veteran status (if ever served in armed forces, or not). To determine the unique patterns of job loss among teenagers and young adults, two dummy variates were specified to account for age: one variate indicated whether a CPS sample member was 16 or 17 years old; another variate indicated whether a sample member was 18 or 19 years old. The reference group for these two age variates was the 20- through 24-year old category. Educational attainment entered the model as integer years of schooling completed. The only years of schooling counted were those spent in graded public, private, or parochial elementary and high schools, colleges and universities, and professional schools, whether day schools or night schools. The criterion variable and variates were measured through face-to-face or telephone interviews with a responsible member of each CPS sample household (see Borus, Mott, & Nestel, 1978, for a discussion of possible response errors embodied in this choice of respondent; see also U. S. Department of Commerce, 1968, and U. S. Department of Labor, 1976, p. 11, for discussion and estimation of errors and biases in these interview data).

Coefficients for each variate in the binomial logistic function fit to these data are reported and interpreted in the next section of this paper.

Findings

Results are shown in Table 1 of regression of personal characteristics of unemployed 16- through 24-year olds on whether job loss was described as their reason for unemployment during March 1979. For the interested reader, footnotes to Table 1 document many technical details and intermediate results of this analysis. According to the raw data, about 2.7 of every 10 sample members were job losers; the average chance of job loss predicted through the statistical model used in this study about 2.4 out of 10. Therefore, the personal characteristics examined in this study underestimate slightly the chances of job loss as a reason for unemployment among teenagers and young adults.

Insert Table 1 About Here

Holding constant all variates in the statistical model at their mean values, 16 and 17 year olds were over twice as likely as 20- through 24-year olds to have job loss described as their reason for unemployment (computed by dividing the average predicted chances of job loss by the chances for the reference category of 20- through 24-year olds). Veterans were about 1.5 times more likely than non-veterans to be job losers. By themselves, gender, race, marital status, being 18 or 19 years old rather than 20 through 24 years, and educational attainment were related only slightly to job loss during the CPS reference period.

Discussion

Teenagers, 16 and 17 years old, not only have had the highest unemployment rates among youth, but also, as shown in Table 1, they were more likely to have been job losers in March 1979 than other unemployed youth between 18 and 24 years old. And, because of the sensitivity of job loss to economic fluctuations, the labor market for 16- and 17-year olds probably is among the most fickle for youth. Although strong racial differences in unemployment rates among youth have emerged since 1966, data analyzed in this study did not reveal meaningful differences in the chances of job loss by race. This provides, at least on actuarial basis, lack of compelling evidence for racial discrimination in discharges and layoffs of youth; of course, evidence of discrimination in individual cases is transparent in these data. Also, being married was related only slightly to the incidence of job loss, even though marital status has been a strong determinant of labor force participation (Bowen & Finegan, 1969; U. S. Department of Labor, 1979, Tables B-1 through B-5) and, for males, unemployment (U. S. Department of Labor, 1979, Table A-25).

At first glance, the inverse, though small, relationship between educational attainment and job loss shown in Table 1 may be contrary to expectations. However, educational attainment is related to employability. The proportion of the civilian labor force employed differed by about ten percent between high school graduates and dropouts over the period covering 1971-1977 (computed from U. S. Department of Labor, 1979, Table B-8). So, a lower likelihood exists that youths with lower than average educational attainment could have jobs to lose.

Although their representation in the March 1979 CPS sample is low (about 5 of every 100 sample members between 16 and 24 years), veterans were the second most likely demographic group to be unemployed due to job loss. The chances for job loss for veterans and for 16- and 17-year olds probably are not additive in any way because of the slight chances of a 16- or 17-year old being a veteran. In addition, different factors may be at the roots of veteran and teenage unemployment, requiring different approaches for treatment. Presidential initiatives through three programs--HIRE I (Help Through Industry Retraining and Employment Program), veteran participation in public service employment programs authorized under Titles II and IV of CETA, and the Disabled Veterans Outreach Program--reflected these different strategies under President Carter. However, at the time this paper is being written, these strategies are among the targets of budget cuts by the Reagan Administration.

What alternatives can be listed for treating the greater susceptibility of 16- and 17-year olds and veterans to job loss? One alternative is to do nothing because job loss may be inconsequential. Are job losers scarred from their discharges or layoffs by calling their lack of job stability to employers' attention or by decreasing crucial on-the-job training and socialization opportunities? Perhaps job loss is like a pesky rash on the wrist, not a symptom of any more serious disease nor a condition likely to erupt into a life threatening situation. The rash is a nuisance treated easily by patent salves. Job losers also have their "salves" in the form of unemployment compensation or union benefits. Similar positions have been taken by some analysts in the popular press, government, and academe when discussing the consequences of unemployment in general (see, for example, Buckley, 1977, or Friedman, 1975).

Or, if job loss is believed to, or can be established to, have negative consequences for individuals and society, then benign neglect of the problem would be inappropriate. Perhaps the industries and occupations from which jobs

have been lost by 16- and 17-year olds and veterans have been among the most vulnerable to economic downturns and upswings. An alternative would be to encourage job preparation and seeking in industries and occupations that are less vulnerable. Such an approach could have two prongs. First, educational planners and developers would need to identify and attempt to avoid these vulnerable elements of the labor market. Second, realistic information about the labor market and training outcomes would need to be disseminated to teenagers and young adults.

Other treatment alternatives could be derived from an analysis of the causes of job loss. Are most job losses due to layoffs, as the coincidential movement of the incidence of job loss with economic activity might suggest? Or, do most young people lose jobs because they are ill-prepared for the technical, communications, and personal/social demands of work? The arena for action against job loss due to economic conditions is in general policies formulated to promote economic stability. Perhaps vocational education and training programs could have the greatest effect on removing the skills deficits young people bring to work.

Data presented as a result of this study cannot parse job loss into its unique causes. However, micro-data files, such as those produced through the National Longitudinal Surveys of Labor Market Experience, the Longitudinal Study of Educational Effects (a.k.a., the National Longitudinal Survey of the High School Class of '72), or other special studies of youth labor market behavior, might be more suited to this research purpose. Also, studies relying on a longitudinal perspective might be able to describe the population of youthful job losers, which was restricted in this study to unemployed youth who lost their last job. Not accounted for were youth who lost their last jobs and who became employed immediately or dropped out of the work force.

Summary

About 2.7 of every 10 16- through 24-year olds unemployed during March 1979 were discharged from their last jobs. Regression analysis of data from the March 1979 Current Population Survey revealed that 16- and 17-year olds were over twice as likely as 20- through 24-year olds to have lost their last job; veterans were about 1.5 times as likely as non-veterans to have been job losers. Gender, race, marital status, and educational attainment were related only slightly to job loss. As long as it is believed or known that job loss among teenagers and young adults has negative consequences for individuals and

society, then several alternative plans can be listed for reducing the incidence of job loss. First, teenagers and young adults can be encouraged to prepare for and to seek employment in industries and occupations that provide stable employment in spite of economic fluctuations. Second, technical, communications, and personal/social skills of teenagers and young adults can be improved on the condition that job loss among youth is caused, for the most part, by their skill deficits and not by the condition of the economy.

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Footnotes

1/ Estimated by applying CPS sampling weights to data from unemployed 16- through 24-year olds in byte 42 of the "person" records in the 1979 Annual Demographic File.

2/ Unweighted data from the 1898 unemployed 16- through 24-year old CPS sample members were analyzed in this study. Ratio estimates of U. S. youth population figures can be constructed from CPS sample data by multiplying each sample member's data by a unique sampling weight provided in the Annual Demographic File. However, multivariate analysis of the resulting weighted data is difficult.

Table 1

Relationship Between Chances of Describing Job Loss as a Reason for Unemployment and Personal Characteristics of 16- Through 24-Year Olds in the Civilian Noninstitutional Population of the United States During March 1979

Characteristic	Sample Mean[a]	Unstandardized Coefficient[b], [c]	Chances of Job Loss Compared to Other Reasons[d]
Gender			0.06 out of 10 greater, if male
male	0.532	0.912*	
female	0.468	rc	
Race			0.14 out of 10 greater, if caucasian
caucasian	0.776	0.151	
non-caucasian	0.224	rc	
Marital Status			0.15 out of 10 less, if ever married
ever married	0.218	0.141	
never married	0.782	rc	
Veteran Status			0.77 out of 10 greater, if a veteran
veteran	0.054	-0.553*	
non-veteran	0.946	rc	
Age			1.23 out of 10 greater, if 16 or 17 rather than 20 to 24 years
16 or 17 years	0.263	-2.033*	
18 or 19 years	0.254	-0.594*	0.48 out of 10 greater, if 18 or 19 rather than 20 to 24 years
20 to 24 years	0.483	rc	
Educational Attainment	12.113	-0.084*	0.33 out of 10 less, if 10 years rather than mean
			0.27 out of 10 greater, if 14 years rather than mean

Source: Estimated from binomial logistic regression of data on reasons for unemployment given by 1898 teenagers and young adults in the 1979 Annual Demographic File assembled by the U. S. Bureau of the Census from the March 1979 Current Population Survey.

[a] Mean values for dummy variates are the proportions of sample members in categories.

[b] Estimated by solving for $\hat{\beta}_j$, as shown in section 4 of Walker and Duncan (1967), where, for person i, $P[\text{loss}]_i = [1 + e^{-\alpha + \sum_j (-X_{ij}\hat{\beta}_j)}]^{-1}$ and $\hat{\beta}_j$ is the unstandardized coefficient for variate j, $P[\text{loss}]_i$ is the probability of a job loss for person i, α is an intercept term, X_{ij} is the value on variate j for person i, and e is the base of natural logarithms.

Table 1 (Continued)

[c/] The value of the intercept term is -0.039. The fit of the model to the data is indicated by a chi-square value of 1984.8, which, with 6 degrees of freedom, is well beyond conventional critical values. This chi-square value is twice the difference in the log likelihood for the model with all variables from the likelihood based on a model containing the intercept only (see Harrell, 1980, p. 83).

[d/] Estimated through two major steps. First, the average probability of job loss, $\bar{P}$[loss], was computed by substituting computed standardized coefficients and mean values for all variates into the equation in footnote b. Then, to estimate the chances of job loss associated with each dummy variate, $\bar{P}$[loss] was computed again, but with the mean value for the reference category substituted for the particular variate under consideration. For example, $\bar{P}$[loss] was computed with the mean value for females on the gender variate, but with mean values for educational attainment and positive categories for each dummy variate. This allowed the difference in $\bar{P}$ [loss] to be stated, given a difference, in this case between males and females, on the variate. In the case of educational attainment, $\bar{P}$[loss] was computed for 10 and 14 years. Program code to conduct these operations is available from the authors for the TI-59 Programmable Calculator or, in PL/1, for the IBM 3033 computer under the MVS operating system.

[*/] These coefficients at least twice as large as their standard errors.

rc = reference category.

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Relationship Between Preferences for Part-Time Work and Characteristics of Unemployed Youths

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Running head: Part-time Work

Relationship Between Preferences for Part-Time Work and Characteristics of Unemployed Youths

Many analysts believe that youth unemployment is not a serious problem because many unemployed youths want only part-time jobs for "pocket money", are enrolled in school, and can depend on other family members for necessities (see Lerman, 1980, and Feldstein, 1977, for a summary of these views). Under this belief, the Reagan administration has reduced efforts on occupational education and other youth services because few economic gains are expected from government spending to reduce youth joblessness. Rather, the administration's "program for economic recovery" emphasizes reductions in the marginal tax rate, government spending, and government regulation contributing to business overhead. As President Reagan (1981b) told members of the NAACP at their 1981 convention, "Massive amounts of government aid and intervention have failed to produce the desired results [in the economy]. A strong economy returns the greatest good. . . . It returns greater benefit than that provided by specific government programs" (p. 703).

Noting the apparent contradiction between the existence of wide-spread joblessness and numerous help-wanted advertisements, the President has questioned the significance of the unemployment figures. In his often-quoted remarks over lunch with Congressional women, the President wondered, "How does a person qualify calling himself unemployed when there is a fellow spending money advertising and saying, 'I've got a job. Come fill my job.'?" (Reagan, 1981a, p. 306). Replaced by concern over inflation, high unemployment--especially among non-white youth--just does not seem to be a "sexy" social issue any more. According to Sandra Shaber of Chase Econometrics, Inc., "What we are seeing now is that the pain threshold [for tolerating unemployment] is higher than it was a couple of years ago" (quoted in Fuerbringer, 1981, p. 4E).

Purpose of the Study

Is this belief about the triviality of youth unemployment, and its consequences for spending on employment and training efforts, justified? We consider this question from empirical, logical, and methodological points of view in the remainder of this paper. First, we treat empirically only one aspect--the desire for part-time work--of the data undergirding the belief that youth unemployment is not a serious problem. Specifically, the relationship was examined between preferences for part-time work and the characteristics of unemployed 16- through 24-year olds in the civilian, noninstitutional population

of the United States during March 1979. This information was derived from an analysis of records of 2,087 unemployed youths from the 1979 Annual Demographic File prepared from the March 1979 Current Population Survey (CPS) by the U. S. Department of Commerce (1979).

Estimates of preferences for part-time work among unemployed 16- through 21-year olds are tabulated monthly by gender, race, and school enrollment status in Employment and Earnings, a U. S. Department of Labor periodical. Typically, those enrolled in school are more likely to be searching for part-time work than those not enrolled in school. In the study presented in the remainder of this paper, regression methods were used to determine whether the relationship between school enrollment status and preferences for part-time work persists independent of gender, race, marital status, receipt of public assistance payments in 1978, household responsibility, veteran status, and educational attainment. These regression results improve our understanding of youth preferences for part-time work because simple tabulations of variables, such as those published in Employment and Earnings, often misstate true relationships among the variables. They extend this understanding because the current study contains variates whose relationship to the desire for part-time work previously have not been considered empirically.

Second, in our discussion of these regression results, we list logical inconsistencies in the argument that youth unemployment is inconsequential because many youths are part-time job seekers. Third, in this same discussion, we examine the methodological problems inherent in actually determining the consequences of youth unemployment. This discussion of logical and methodological problems should suggest points of departure for research by occupational educators and others interested in constructing a rationale for education for work as a means for treating problems associated with youth labor market difficulties.

Methods

Data

Data examined in this study were collected through the March 1979 CPS. The CPS is a monthly household sample survey conducted by the U. S. Bureau of the Census to provide estimates of the size and distribution of employment, unemployment, and other characteristics of the civilian, noninstitutional population of the United States. About 55,000 households were selected and surveyed for the March 1979 CPS, producing data on over 120,000 persons who were 16 years of age or older. March 1979 CPS data from unemployed 16- through 24-year olds

were extracted from the 1979 Annual Demographic File, a Department of Commerce machine-readable data file released for public use.

A detailed technical description of the CPS sampling frame and methods, data collection and processing, and population estimation was provided by the U. S. Department of Commerce (1978). The Annual Demographic File is available for use by interested researchers through the U. S. Bureau of the Census, Customer Products Division, as well as through a variety of commercial vendors. The data used in this study from the Annual Demographic File can be obtained from the authors on a requestor-provided magnetic tape.

The March 1979 sample included 2,087 unemployed youths. Of these, 1,363, or 65.3 percent, claimed to be searching for full-time jobs. The remaining 724, or 34.7 percent, unemployed teenagers and young adults reported that they were looking for part-time jobs. The distinction between part-time and full-time status was left for respondents to define. Empirical work reported in this paper attempted to determine the distinguishing personal features of these 724 part-time job seekers, compared to the 1,363 persons who were searching for full-time jobs.

Ratio estimates of U. S. youth population figures can be constructed from CPS sample data by multiplying each sample member's data points by a unique sampling weight provided in the Annual Demographic File. In this way, sample members "speak" for all members of the population. About 35 of every 100 of the 2.8 million 16- through 24-years unemployed during March 1979 wanted part-time jobs according to ratio estimates derived for this research from the 1979 Annual Demographic File. Therefore, the proportion of part-time job seekers in the sample was about the same as estimated for the population. Unweighted data were analyzed in this study because methods currently are unavailable for handling weighted data in the type of regression computed in this research.

Analysis

Logistic regression methods (see Walker & Duncan, 1967, especially equation 3.1) were used to analyze data for this study. Gender, race, marital status, household responsibility, receipt of public assistance payments, veteran status, educational attainment, and several age by school enrollment status interaction terms were included in this regression model. These variates were regressed on a categorical criterion variable indicating whether an unemployed youth preferred a part-time job during the March 1979 CPS reference period. The logistic specification restricted the estimated probability of

desire for part-time work to range between zero and positive one. Ordinary least squares regression on a nominally-scaled criterion variable can produce estimated values outside this range. And, because such a qualitative variable is not distributed normally, estimation of the model's coefficients through ordinary least squares methods will not be efficient in a statistical sense (Theil, 1971).

Gender entered the model as a categorical variate (if male, or not) as did race (if caucasian, or not), marital status (if ever married, or not), veteran status (if ever served in the Armed Forces, or not), receipt of public assistance payments (if received public assistance payments in 1978, or not), and household responsibility (if head or wife of head of household, or not). To determine unique patterns of preference for part-time work among teenagers and young adults, two categorical variates were specified to allow age and school enrollment to interact. One variate indicated whether a CPS sample member was 16 or 17 years old and enrolled in school; another variate indicated whether a sample member was 18 or 19 years old and enrolled in school. The reference group for these two interaction terms was 16- through 24-year olds not enrolled in school. Educational attainment entered the model as integer years of school completed. With the exception of gender, race, and school enrollment status, the relationships have not been studied among the variates selected and youth preference for part-time work. However, each variate has a well-established link with youth labor market activity.

Gender and marital status have been strongly related to youth labor force participation over the past 30 years (U. S. Department of Labor, 1980, Tables A-4 and B-2). During this period, large racial differences were observed in youth unemployment rates, with these differences widening markedly since 1966 (U. S. Department of Labor, 1980, Tables A-20 and A-21. Also, in spite of their low representation in the labor force, young Vietnam-era veterans have been over-represented in the ranks of the unemployed (U. S. Department of Labor, 1980, Table 2 and p. 102).

Age and schooling also have been strongly related to youth unemployment rates. These rates have been highest among 16- and 17-year olds, especially among those not enrolled in school (computed from data in Young, 1979, Table A). And, Young (1979, p. 36) determined that unemployment rates among people with no more than 10 years of schooling in 1978 were double those with 12 years of schooling, and were triple those with 16 years of schooling.

Household responsibility is a proxy, and decidedly imprecise, measure of need for income available through full-time employment. The head of a household is one in whose name a home is owned or rented, or, if held jointly, any one of the owners or renters. Transparent in this variate is the amount of the unemployed youth's assets, in-kind wealth, or motivation to work which could affect serious labor force attachment. Similarly, receipt of public assistance income is a proxy measure of poverty, although eligibility levels for public assistance may not objectively define economic hardship. By public assistance is meant payments such as aid to families with dependent children and welfare. Moreover, because this measure refers to public assistance income received in 1978, the assumption is made that low income status persisted into March 1979. Youths from families with low incomes often bear a large share of unemployment (Young, 1979, pp. 37-38; Iden, 1976, p. 93, Table 10).

The criterion variable and variates were measured through face-to-face interviews or telephone interviews with a responsible member of each CPS household. Borus, Mott, & Nestel (1978) provide an analysis of possible response errors embodied in this choice of respondent (see also, U. S. Department of Commerce, 1968, and U. S. Department of Labor, 1976, ch. 11, for a discussion and estimation of errors and biases in these interview data). Coefficients for each variate in the logistic function fit to these data are reported and interpreted in the next section of this paper.

Findings

Results are shown in Table 1 of the regression of characteristics of unemployed 16- through 24-year olds on whether they wanted a part-time job during March 1979. Footnotes to Table 1 document many technical details and intermediate results of this regression analysis. According to the raw data, about 35 of every 100 sample members wanted a part-time job; the average chance of desiring part-time work calculated through the statistical model applied in this study was 33 out of 100. Therefore, the characteristics examined in the model specified for this study underestimate slightly the chances of part-time work preference among unemployed youth.

Insert Table 1 About Here

Dominance of age and school enrollment status in the logistic equation displayed in Table 1 is demonstrated in Table 2. Table 2 contains the results of a simulation of the chances of part-time work preference for variates with coefficients in Table 1 that were at least two times their standard errors. These chances of part-time work preference for various characteristics are

compared to chances for the "typical" 16- through 24-year old. By "typical" is meant a youth with characteristics close to the sample mean; that is, the "typical" youth was male, caucasian, not enrolled in school, not a veteran, not a head, or wife of a head, of a household, not receiving public assistance, unmarried, and had 12 years of schooling.

Youths 16 or 17 years old who were enrolled in school were about 82 percent more likely than the "typical" youth to be searching for part-time work. Those enrolled in school and 18 or 19 years old were 67 percent more likely to have preferred a part-time job. Gender and educational attainment, although having large regression coefficients in Table 1 compared to their standard errors, were related only slightly to desire for part-time work. The coefficients for race, veteran status, household responsibility, receipt of public assistance payments, and marital status were not large enough to be of statistical or practical importance in this analysis.

Insert Table 2 About Here

Discussion

The results presented in Tables 1 and 2 corroborate other research findings that most youth enrolled in school want part-time jobs. The contribution of this analysis is that the relationship between school enrollment status and preference for part-time work was shown to be independent of other variates studied. However, several logical inconsistencies are evident using these data to assert that youth joblessness is inconsequential, an assertion that is part of the foundation of current benign neglect of youth unemployment in public policy. Additional methodological sophistication is needed to examine such an assertion.

Logical Inconsistencies

Some teenagers searching for part-time work may be interested in a job only casually, without either seriousness or sense of purpose injected into their job search. However, knowing merely that they are searching for part-time work is not sufficient to conclude this. The data used in this research--the same data used by the government to estimate official unemployment figures--only provide a measure of labor force activity. As Cain (1979a, 1979b) has pointed out, unemployment figures never were intended to measure hardship; rather, unemployment rates are indicators of the cyclical response of the economy to those who can work and seek work--without any additional judgments

about the utility of work for the jobseekers. For instance, use of preferences for part-time work among unemployed youth enrolled in school as evidence of the triviality of the youth unemployment problem ignores the complementarity between school and work for many youth. Many low-income youth may need the earnings from part-time jobs to stay in school (see Bowers, 1979). At best, beliefs about the insignificance of youth unemployment using cross-sectional labor force data are highly speculative.

Methodological Necessities

Just what sort of evidence, then, would be needed to examine the consequences of youth unemployment? Evidence is needed on the private and social costs of youth unemployment, from aggregate and individual perspectives. In the aggregate, the Employment and Training Report of the President (U. S. Department of Labor, 1980, pp. 76-77) noted that society loses the potential output unemployed youths could have created, even at part-time rates. Their idleness reduces their personal and family incomes, with an unknown effect on government outlays for such transfers as food stamps and public assistance payments (see also Brenner, 1980). A comprehensive accounting of these private and social costs in the aggregate would aid appreciably in the debate over the consequences of youth joblessness.

An even more important question might be what are the long-term effects of youth labor market problems (even lack of part-time work experience) on measures of subsequent adult welfare? Evidence is only beginning to emerge, mostly from analyses of longitudinal data, on the significance of youth unemployment for adult life. Stevenson (1978) found that adult employability and earnings are related positively to opportunities to gain work experience while young. Coleman (1976) and Freeman (1976) stressed the importance of work while in secondary school on future employment. And, Stephenson (1979) showed that work during secondary school was associated with lower rates and shorter periods of post-school joblessness among young men and women studied in the National Longitudinal Surveys of Labor Market Experience (see Parnes & Sheets, 1970).

One serious methodological problem is presented in studies of the consequences of individual youth unemployment, however. Suppose those unemployed while young are more frequently unemployed as adults. One explanation is that early unemployment had a genuine behavioral effect on individuals. Heckman (in press; see also, Flinn & Heckman, in press) called this state dependence; that is, status at one time depends on status at a previous time. Another explanation,

labelled heterogeneity by Heckman (in press), that can be offered is that these individuals are merely members of racial or other groups that experience high unemployment persistently--unaltered or "unscarred" by their previous labor market problems.

Tuma, Hannan, and Groenveld (1979) provided methods for distinguishing heterogeneity from state dependence, and Stephenson (1979) has applied these methods in his study of the consequences of work experience while in school. This methodological problem is quite common in a variety of research areas (cf., Singer & Cohen, 1979, for a study of this problem with data on malaria incidence and recovery). The methodological advances for the treatment of this problem will need to be introduced into any serious study of the consequences of youth employment.

Summary

Using data from the March 1979 Current Population Survey, the relationship was examined between preferences for part-time work and the personal characteristics of 2,087 unemployed 16- through 24-year olds in the civilian, noninstitutional population of the United States. Age and school enrollment were found to be the strongest correlates of desire for part-time work. Gender, race, veteran status, marital status, and educational attainment were related only slightly to part-time job preferences. These data support the notion that most unemployed youths searching for part-time work are 16 to 19 years old and enrolled in school; on the other hand, knowing merely this does not indicate that youth unemployment has little economic significance, as some analysts have suggested. Additional research on the consequences of teenage labor market problems on subsequent adult well-being is needed to determine the significance of youth unemployment.

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Table 1

Relationship Between Preferences for Part-Time Work and Characteristics of Unemployed 16- Through 24-Year Olds in the Civilian Noninstitutional Population of the United States During March 1979

Characteristic	Sample Mean[a]	Unstandardized Coefficient[b], [c]
Gender		
male	0.532	-0.483*
female	0.468	rc[d]
Race		
caucasian	0.776	0.220
non-caucasian	0.224	rc
Marital Status		
ever married	0.218	-0.015
never married	0.782	rc
Veteran Status		
veteran	0.049	-0.607
non-veteran	0.951	rc
School Enrollment by Age		
16 or 17 years and in school	0.200	4.661*
18 or 19 years and in school	0.067	3.323*
16 through 24 years and not in school	0.733	rc
Household Responsibility		
head or wife of head	0.197	0.120
not head or wife	0.803	rc
Public Assistance		
received in 1978	0.058	-0.104
not received in 1978	0.942	rc
Educational Attainment	12.153	0.141*
Intercept Term	--	-3.500*

Source: Estimated from logistic regression of data on incidence of part-time work preferences of 2,087 unemployed teenagers and young adults in the 1979 Annual Demographic File assembled by the U. S. Bureau of the Census from the March 1979 Current Population Survey

a/ Mean values for categorical variates are the proportions of sample members in categories

b/ Estimated by solving for $\hat{\beta}_j$, as shown in section 4 of Walker and Duncan (1967), where, for person i, $P[part]_i = [1 + e^{-\alpha + \sum_j (-X_{ij}\hat{\beta}_j)}]^{-1}$ and $\hat{\beta}_j$ is the unstandardized coefficient for variate j, $P[part]_i$ is the probability of part-time work preference for person i, α is an intercept term, X_{ij} is the value on variate j for person i, and e is the base of natural logarithms.

c/ The fit of the model to the data is indicated by a chi-square of 1124, which, with 9 degrees of freedom, is well beyond conventional critical values. This chi-square value is twice the difference in the log likelihood for the model with all variables from the likelihood based on a model containing the intercept only (see Harrell, 1980, p. 83).

d/ rc = reference category.

*/ Indicates coefficient at least twice as large as its standard error.

Table 2

Simulation of Chances of Preferring Part-Time Work by Age, School Enrollment, Gender, and Educational Attainment

Characteristic[a]	Compared to Chances for "Typical"[b] Youth
School Enrollment and Age	
if 16 of 17 and enrolled in school	8.2 of 10 greater
if 18 or 19 and enrolled in school	6.7 of 10 greater
Gender	
if female	0.6 of 10 greater
Educational Attainment	
if 10 years of education	0.3 of 10 less
if 14 years of education	0.3 of 10 greater

Source: Computed from coefficients and equation in footnote b for Table 1. The estimated probability of desire for part-time work for the "typical" would be: $[1.0 + e^{(-1.0)(-3.5\ \ 0.48 + 0.22 + ((12.0)(0.14)))}]^{-1.0}$ or 0.11. As an example of the derivation of the figures tabulated, the gender coefficient is dropped if a male/female comparison is desired (because the categorical variate was coded in the equation as "1" for males and "0" for females). So, the probability of preference for part-time work for a female with all other "typical" characteristics is:

$[1.0 + e^{(-1.0)(-3.5 + 0.22 + ((12.0)(0.14)))}]^{-1.0}$ or 0.17. Therefore, the estimated difference between males and females with other characteristics held constant was 0.06, or 0.6 out of 10.

[a]Only characteristics with coefficients in Table 1 that were at least twice as large as their standard errors were tabulated.

[b]"Typical" in the sense that characteristics close to the average for the sample were chosen. The "typical" youth was male, caucasian, not enrolled in school, not a veteran, not a head of a household, not receiving public assistance, unmarried, and had 12 years of schooling.